

WHAT IS CLAIMED IS:

1. A communication data relay system for relaying between two or more domains each configured by one or more networks, a relay source domain having routing information to a relay destination domain, comprising:
 - two or more interface modules for accessing said network;
 - a domain definition module for defining the domain configured by said one or more networks;
 - an inter-domain communication definition module for defining a communicability between the domains;
 - a routing information storage module for storing pieces of routing information each indicating a relay destination of communication data in a way that separates the routing information for every domain; and
 - a relay control unit for controlling relay of the communication data,
 - wherein said relay control unit controls the relay of the communication data with reference to said routing information storage module corresponding to the domain concerned in the case of a relay within said same domain, and judges a connectability for the relay in accordance with definitions in said inter-domain communication definition module in the case of a relay between the domains different from each other.
- 25 2. A communication data relay system according to claim 1, further comprising a destination address search module for the relay destination domain,

wherein if the relay source domain does not have routing information to the relay destination domain, said destination address search module searches a destination address to the relay destination domain in response to a request from a source communication device within the relay source domain, and notifies said source communication device of a relay address within the relay source domain that corresponds to the destination address, and

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said relay control unit relays the communication data addressed to the relay address to the destination address in the relay destination domain.

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3. A communication data relay system according to claim 1, further comprising a routing control information storage module to the domain to which a communication data processing device for processing the communication data is connected, wherein said relay control unit, when controlling the relay of the communication data, causes said communication data processing device to process the communication data, and relays 15
20 the thus processed communication data.

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